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Summary by the Chairman of the Regional Implementation Forum on Sustainable Development in Latin America and the Caribbean

Note by the Secretariat

I. Introduction

1. The Regional Implementation Forum on Sustainable Development in Latin America and the Caribbean, held in Santiago, Chile, on 19 and 20 January 2006, was convened by the Executive Secretary of the Economic Commission for Latin America and the Caribbean (ECLAC), in fulfilment of the mandate granted by virtue of ECLAC resolution 602 (XXX), in which the Commission agreed to proceed with the inclusion of a regional forum for the implementation of the decisions adopted at the World Summit on Sustainable Development within its framework of activities. The Commission is thereby also carrying out the preparatory process of the Commission on Sustainable Development (CSD) at its fourteenth session, by holding regional meetings in preparation for the global meeting.

2. Seventeen States members of ECLAC participated in the meeting, namely, Antigua and Barbuda, Argentina, Bolivia, Brazil, Chile, Colombia, the Dominican Republic, Ecuador, Honduras, Jamaica, Mexico, Panama, Peru, Saint Lucia, the United States of America, Uruguay and Venezuela (Bolivarian Republic of). In addition, two States Members of the United Nations that are not members of the Commission — Austria and Malta — were present. The Vice-Chairman for Latin America and the Caribbean of the Bureau of the Commission on Sustainable Development at its fourteenth session also attended.

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3. For their part, representatives of various bodies, programmes and agencies of the United Nations system and representatives of intergovernmental organizations, such as the Regional Energetic Integration Commission and the European Union, were also present.

4. The participation of key groups and civil society organizations was ensured through the presence of bodies that have consultative status with the Economic and Social Council and other organizations with a special interest in the issues to be discussed at the Forum.

5. The Presiding Officers of the Forum were as follows: Chairman, Mexico; Vice-Chairmen, Brazil, Honduras and Jamaica; and Rapporteur, Colombia.

6. The Forum had before it and adopted the following agenda: 1. Election of presiding officers; 2. Adoption of the agenda; 3. Energy for sustainable development; 4. Industrial development; 5. Air pollution/atmosphere; 6. Climate change; 7. Other matters; and 8. Adoption of agreements.

7. At the end of the meeting and before the presentation of the Rapporteur's report, the delegates and participants gave the Chairman a vote of confidence so that he could prepare, with the support of the ECLAC secretariat, a *Summary by the Chairman of the Regional Implementation Forum on Sustainable Development in Latin America and the Caribbean*, to be submitted to the secretariat of the fourteenth session of the Commission on Sustainable Development as the region's contribution to the global process.

II. Energy for sustainable development: situation in the region, energy efficiency and renewable energies

8. The topic of energy was included as one of the main areas of work at the ninth session of the Commission on Sustainable Development, at which countries agreed that stronger emphasis should be placed on the development, implementation and transfer of cleaner, more efficient technologies and on the need to further develop and expand the role of alternative energy sources.

9. The complex challenge of energy and sustainable development was highlighted at the Rio Summit and is, moreover, widely discussed in Agenda 21, which underscores the fact that current levels of energy consumption and production are not sustainable, especially if demand continues to rise. It also stresses the importance of using energy sources in a way that is consistent with the aims of protecting human health, the atmosphere and the natural environment.

10. Among the agenda items chosen by the Commission on Sustainable Development for its fourteenth and fifteenth sessions, energy is central, since it is closely and clearly associated with the other three items. It is important to recognize the links between the four items and, with regard to energy in particular, to examine both the composition of energy supply and trends in terms of demand, while also identifying and analysing the externalities associated with both.

11. **The major challenges**: Latin America has been unable to decouple the upward trend in energy consumption caused by economic growth.

12. A comparison of the evolution of average energy intensity for Latin America and the Caribbean with that of all the States members of the Organization for Economic Cooperation and Development (OECD) reveals that the OECD countries managed to reduce intensity by 24 per cent from 1980 to 2004, while Latin America has not improved productivity since 1980, recording an accumulated increase of almost 2 per cent.

13. A number of indicators relating to energy for sustainable development show that in Bolivia and Trinidad and Tobago, the robustness indicator is falling. This is widely seen as a result of the increased dependency of those economies on oil exports. In general, there has been a relative improvement in indicators relating to fulfilment of basic requirements and, as a result of urbanization, there has generally been an improvement in electricity supply too. However, energy consumption continues to be plagued by inequalities in most Latin American countries.

14. In Argentina and Mexico, the fossil fuel reserves/production ratio fell.

15. **The consumption pattern followed by Latin America is worryingly polluting**: In Latin America and the Caribbean, CO_2 emissions for 2004 were 75 per cent higher than those recorded in 1980, representing a sustained annual increase of around 2.4 per cent. An emissions curve showing the relation between emissions per unit of output with GDP per capita does not show a clear or well-defined trend: between 1980 and 1990, the trend was negative, albeit with some fluctuations, in that per capita income fell as emissions rose; between 1990 and 1994, there was a clear and sustained shift; and lastly, between 1994 and 2004, emissions fluctuated and increased.

16. **There is still some uncertainty over whether this pattern will change in the intermediate future (2030)**: According to various analyses regularly prepared by three institutions,[1] fossil fuels will enjoy a greater share in the future: oil, because it is indispensable for transport, and gas, because it is a cleaner source than coal and has competitive advantages for electricity production.

17. As a possible alternative to ease the investment crisis in the field of electrical energy generation, steps were taken in recent years to define the foundations for a greater integration of electricity and natural gas companies and by harmonizing regulations that encourage investment and, particularly, by ensuring stability in the rules of the game. For that reason, electricity and hydrocarbon companies alike showed an interest in maintaining assets in both activities, moving towards the establishment of global energy companies.

18. There is no doubt that greater integration of electrical and hydrocarbon supply chains could help get around problems relating to investment. However, at the same time, such integration does nothing to change the trend towards a pathway that until now has not proven to be very environmentally friendly.

19. Latin American countries do, however, have a number of comparative advantages, which can be summarized as follows: (a) they make a relatively small contribution to total greenhouse gas emissions compared to other regions of the

[1] International Energy Agency, *World Energy Outlook (2002 and 2004)*; United States Department of Energy, *International Energy Outlook (2004)*; and the European Commission's Directorate-General for Energy and Transport, *World Energy, Technology and Climate Policy Outlook 2030* (a report known by the acronym WETO).

world; (b) they are potentially a net provider of global environmental services, in terms of marketing atmospheric CO_2 capture projects to those nations facing high mitigation costs; (c) they have an opportunity to improve the current trend concerning regional energy intensity through policies that promote advances in energy efficiency; and (d) they have an opportunity to improve energy supply diversification.

1. Renewable energies

20. The share of renewable energy sources in the energy matrix of Latin America and the Caribbean has fallen by 1 per cent. Only a few countries in the region show improvement, most importantly Brazil, Costa Rica, the Dominican Republic, Guyana, Nicaragua and Paraguay. The main reason for this stagnation is that not enough has been done to overcome the obstacles to renewable energies (whether they be economic, regulatory, technical, institutional, financial or other obstacles). ECLAC has therefore identified four key areas on which countries should concentrate their support measures in this regard: greater emphasis on hydro-energy; the introduction of renewable energies in rural communities; the rational use of firewood; and the efficient integration of biofuels to energy markets.

21. Major sectors in the economies of Caribbean countries like tourism should consider increasing the use of renewable energy, for instance solar energy, in their activities. Some countries of the subregion use this type of energy, although the process is at an experimental stage, and energy efficiency and variations in access have been a matter of ongoing interest.

22. For its part, the Brazilian sugar cane industry is supplying energy and in the future may be able to supply renewable materials, such as plastics and chemicals. Its growing share in the energy matrix has reached 13 per cent. The use of ethanol as fuel for vehicles began in the 1970s, and today over 2.5 million cars run on ethanol. All the gasoline sold in the country's service stations is mixed with ethanol, with no need to adapt car motors. The Brazilian experience with clean fuels could help significantly in demonstrating that ethanol is a real possibility to supply a large part of the world market, since it is a reliable product.

23. Some concerns affect initiatives to promote the use of these products as automobile fuel, with regard to how their prices vary according to the market and are not regulated by the Government.

24. Some best practices in the promotion of renewable energies are given in Brazilian Act. No. 10.438, PROINFA (Programme of Incentives for Alternative Sources of Electrical Energy), which establishes incentives for renewable alternatives (wind, biomass, minihydraulics) and sets a goal of 10 per cent of the Brazilian energy matrix to come from these sources by 2020. Another successful initiative has been the wind energy plan in Jamaica, with the installation of a 20 MW plant partially financed by the sale of carbon credits. Other best practices to be highlighted are El Salvador's experience with geothermal energy (over 100 MW is now generated from that source) and the "Proalcohol" programme for the promotion of bioethanol from sugar cane in Brazil. In all these cases, State intervention — both in terms of political decision-making/strategy and financing with up-front capital, has been essential; and in all cases, private industry has later become involved to develop and perfect the business in public-private form.

25. With the objective of increasing the proportion of renewable energies in the energy matrices of the countries of Latin America and the Caribbean, the Governments of the region face the following challenges: (a) strengthen the State's role as facilitator by promoting the inclusion of the Millennium Targets in national policies; (b) use price mechanisms to internalize the benefits of renewables (socio-environmental and strategic); (c) consolidate a renewable-energy diplomacy by revitalizing international cooperation in that area; (d) take full and effective advantage of the global emissions market for carbon credits; (e) design creative financing schemes and make a commitment to regional financing bodies; (f) explore the role of renewable energy in the integration and development focal points (the Initiative for the Integration of the South American Regional Infrastructure and the Puebla-Panama Plan).

26. In thematic terms, four major areas can be identified in which countries should focus their analytical and proactive efforts: the need to place a renewed environmental and social value on hydroenergy; the incorporation of renewable energies for the integral development of rural communities; the sustainable and rational use of wood; and the efficient integration of biofuels in national energy markets.

27. Finally, it is important to highlight the relationship between energy and the Millennium Development Goals, since there is a clear linkage between poverty reduction and access to energy, which also applies to the goals regarding health, education and gender equality. One characteristic of the region seems to be that energy supply has greater priority than electrification and that a sectoral focus has been a barrier. Furthermore, energy planning should take into consideration the socio-economic realities of such vulnerable groups as women, on the understanding that there are links between gender, energy and development. The gender perspective must be part of the evaluation matrix. Women have a significant role to play in the creation of sustainable energy consumption and production models and in mitigation of climate change. The goal of gender equity should be present at all stages of environmental planning, as it is fundamental to the fulfilment of all the Millennium Development Goals.

2. Areas of opportunity

28. With regard to sustainable pricing of energy products, standardized regional indexes could be developed to reflect the toxicity of fuels in their prices. Such indexes could serve as a basis for energy and taxation policies in order gradually to modify the use of fuels.

29. The region should attempt to reduce vulnerability to fluctuations in price and supply of energy products and should seek to increase its energy independence by increasing the use of renewable energy, expanding its coverage for social development purposes and generally improving energy efficiency in all sectors of the economy. It is essential to take measures in the areas of transport and industry and to introduce incentives for small and medium-sized businesses to use more efficient technology. The right to energy efficiency should be incorporated into public policy as an economic right of citizens, and such policies should consider new sources of energy and the management of externalities, since the market system has turned out to be unable to solve the problem of efficient use.

30. Progress is needed in the definition and analysis of alternative macroeconomic scenarios, taking into account the relationships between energy integration, promotion of renewable energy and energy efficiency, with the aim of achieving true integration of the theme of the environment in the economic agenda. An essential element in order to achieve this is to see this change as an opportunity and not as a restriction on economic development. Therefore a long-term vision must be generated with gradual changes in the patterns of energy generation and use, to enable such economic achievements as improvements in productivity and penetration of new export markets.

31. In general, prices of basic energy products do not consider externalities, and in order to reach the targets of the Kyoto Protocol, sustainable pricing must be established incorporating these externalities. Therefore it is necessary to continue the dialogue on integration of the hemisphere, in order to include the rational use of energy and the promotion of renewable sources in cooperation systems.

III. Industrial development

32. A comparative analysis of the countries of the region allows two development strategies to be identified based on the relationship of patterns of international specialization and growth models; one based on seeking revenue derived from knowledge and the other on revenue derived from abundant factors, for example natural resources.

33. The Latin American countries have mainly followed the second type of strategy, with uneven results in terms of growth and distribution of income in the long term with respect to those economies which have pursued the first type of strategy.

34. Latin American economies suffer a marked delay with respect to developed and developing economies both in participation of the sectors for dissemination of knowledge in industrial added value and in the development of productivity levels and in relation to technology efforts carried out. Although in some cases high growth rates have been achieved, they do not translate into a transition towards a more distinct role for knowledge as a comparative advantage.

35. Alongside the structural weaknesses noted, there is a human and productive base that can respond to adequate stimulus. The countries of the Southern Cone have shown a great capacity for recovery, while in others there are dynamic export sectors which could be more closely integrated with the rest of the economy. At the same time, despite crises, the political systems have preserved their democratic institutions, offering a way to seek consensus around a growth strategy with structural change.

36. The existence of abundant factors such as natural resources or inexpensive labour may be able to sustain high rates of growth for a certain period of time, without there being any need to make a major investment in knowledge, but this availability of resources, in and of itself, is not sufficient. On the one hand, if growth based on abundant factors does not promote structural change and increases in productivity throughout the economy, the result will be undesirable situations of distributive inequality, poor quality of jobs and structural heterogeneity. On the

other, growth in such cases is highly vulnerable to changes in the international economy and in patterns of demand.

37. Empirical evidence and international experience indicate that for convergence to take place, over the long term economies have to be capable of transforming their productive structure. Within such a transformation, which is not a spontaneous occurrence but rather the product of a development strategy, the sectors which disseminate knowledge have to play an increasingly significant part in industry. The slipstreaming effects of such sectors, their virtuous relationship with investment in technology and with external competitiveness, are necessary in order to combine rapid growth in productivity with high rates of employment in the economy, thereby reducing structural heterogeneity.

38. **Industrial development and sustainability — lessons learned**: the research carried out by ECLAC in four countries (Argentina, Colombia, Chile and Mexico) has confirmed the importance of the sector of small- and medium-sized enterprises (SMEs) to countries' development, and the contributions that they make in the economic, social and labour spheres. However, insufficient consideration has been given to the areas of technology, the environment and funding. The problem of the sector is therefore clearly a problem of sustainability in the widest sense. The policies and instruments that are preferably utilized in order to make progress in this sector have had the drawback of being, from this point of view, only partial since they have tackled each aspect of sustainability separately, thereby preventing them from reinforcing one another in bringing about comprehensive progress.

39. The principal obstacles arise from the fact that there is not a genuine environmental policy for the SMEs (and microenterprise) sector, one taking into account the economic and social determinants affecting the subsector. Regulations have been implemented which treat the industrial sector as a homogeneous whole, not allowing for the specific nature of the SMEs with regard to their particular productive structure. The latter's response was consequently one of refusal to comply with the environmental regulations, which caused them to fall short in their contribution to sustainability, led to a failure to seize the opportunities offered by the environmental sector itself for general innovation and new business, and worsened even further the already poor relationship between the SMEs (and microenterprises) and their local environment.

40. The principal achievements are associated with cleaner production programmes, which many countries have adopted to drive forward sustainable development in industry. Such programmes have shown themselves to be an effective mechanism to commit this sector to a strategy of environmental protection. In particular, note should be taken of the preventive approach implicit in countries greater readiness to adopt cleaner production programmes, which provides an opportunity for modernization of the sector, through giving preference to ecologically efficient technologies and processes rather than opting for end-of-pipe remedial solutions. So far, this approach has not been widely applied in the SMEs sectors, but given the deficiencies in public policy, it may be asserted that the most important achievements do come from the private industrial sector. Notably, important progress has been seen in the development of strategies of joining forces between large companies and SMEs in order to move ahead in areas such as certification and supplier policy. Similarly, the efforts to encourage social and

environmental responsibility in firms have been promoted by trade-union organizations, with beneficial effects among those involved.

41. **Regional priorities that might be identified and challenges**: regional priorities should be concentrated on tracking more closely the advances that the business sector is making, paying very close attention to market dynamics, in order to found public policy on a basis of reality rather than on grandiloquent schemes, which very often result in a waste of effort and resources. Thus, widely accepted business paradigms such as ecological efficiency, social responsibility of firms and cleaner production should be promoted, since these are still found only to a very limited extent in the region. On the other hand, the region should make an effort to promote public policies marked by decentralization, which will allow for a wider scope of action at the local level, where there are real opportunities for achieving progress in sustainable industrial development, first and foremost for SMEs and microenterprises.

IV. Air pollution

42. Recent studies at the regional level into the effects on human health of the deterioration in air quality in Latin America and the Caribbean confirm that in those towns where concentrations of particulates and other pollutants exceed the stipulated levels, morbidity and mortality rates have increased, particularly among the vulnerable population, which principally comprises older people and infants. Illnesses among adults translate into millions of working days lost. Monitoring of the emissions involved in indoor exposure reveals an exposure level comparable to that outdoors, with a greater harmful effect on the population owing to the length of exposure.

43. Increasingly, the greatest level of blame has to be attached to the transport sector, which is characterized by very old vehicles, high sulphur content in the fuel, inadequate servicing, a lack of environmental regulations and massive and growing use of private transportation. The industrial sector's responsibility for the problems is concentrated in a limited number of industries associated with thermal electricity generation. In many towns, there is a need to deal with emissions from the burning of large tracts of agricultural land and the growing use of wood or biomass as fuel. Analysing the responsibility for the emissions makes it possible to devise criteria for prioritizing actions aimed at reducing them.

44. The region has seen a rapid convergence in systematic tracking of concentrations of regulated pollutants (ozone, nitrogen dioxide, sulphur dioxide, particulates, carbon monoxide and lead), although with a wide variety of monitoring methods and a notable weakness in ensuring the quality of the information gathered and in ascertaining the exposure's health impacts on the population. The observable trends are downwards, especially for particulates and, to a lesser extent, ozone, but the stipulated levels are frequently exceeded. In the case of the Caribbean, preliminary information indicates worrying concentration levels for pollutants, especially with regard to exposure on a local scale (around certain industrial activities and in direct exposure to emissions from vehicular traffic).

45. With respect to the establishment of specific measures to control air pollution, the Pan-American Health Organization has drawn attention to the need to take into

account the impact on the health of the population, both in prioritizing and selecting measures.

46. It can be seen that there are lines of action of a systematic nature that should be followed to tackle the issue of air pollution in the principal towns in our region:

(a) An increasing level of regulation throughout the region of emissions from industrial sources and from vehicles in general;

(b) Consolidation of experience gained from pollution-control plans from the 1980s and 1990s and establishment of contingency plans to handle crisis situations, involving restrictions on operations at the sources with the greatest levels of emissions (São Paulo, Santiago, Chile, and Mexico City);

(c) Specific air-quality management plans, national air-quality policies, environmental management policies and environmental sanitation plans, one of whose aspects is the quality of the atmosphere (particularly in Central America).

47. Other supporting actions, undertaken in concert, can assist with the measures being taken in this region:

(a) Simultaneous design and implementation of plans for optimizing public transport systems, as was done in Bogotá and Santiago with the TransMilenio and Transantiago bus systems respectively, in São Paulo, Brazil, and in Quito;

(b) Integration of urban planning and transport planning with environmental policy (agreement between public and private bodies to improve air quality by integrating urban and transport planning with environmental policy for 2003-2006 in San José).

48. Some of the challenges still to be dealt with in the region involve:

(a) Reduction of excessive pollutant levels in towns by way of wider distribution of air-management and air-cleaning plans which prioritize the measures to be taken from the point of view of the greatest benefit to the health of the population. More widespread preparation of emission inventories together with a physical and chemical description of particulates will makes it possible to prioritize the various mitigation or prevention measures;

(b) Tackling emissions from the burning of large tracts of agricultural land and from the growing use of wood or biomass in general as fuel;

(c) Enhancing regulation of the industrial sector, which currently suffers from a marked absence of environmental regulations;

(d) Greater technological innovation in the area of reducing pollution from fixed and mobile sources, and also in the area of technological requirements for thermal systems for heating, washing and cooking; and improvement of the thermal efficiency aspects in housing construction.

49. Among the bottlenecks to be tackled, certain problems may be highlighted:

(a) Limitations on the processes of decentralization of functions, integration of different policies and sectoral coordination;

(b) The difficulty in local-level implementation of instruments decided upon at other institutional levels (national and/or metropolitan plans);

(c) Financial restrictions on the taking of decisions concerning investments in pollution-reduction plans.

V. Climate change

50. The Latin American and Caribbean region is a key indicator of global biodiversity, as 40 per cent of the world's known species are found in that area. The Bolivarian Republic of Venezuela, Brazil, Colombia, Ecuador, Mexico and Peru are considered by the United Nations Environment Programme (UNEP) to be highly diverse.

51. The region also has an abundance of natural resources as well as one of the world's main forest reserves. The Food and Agriculture Organization of the United Nations (FAO) estimates that approximately 47 per cent of the territory is composed of forests or jungles, which is higher than the world average.

52. Latin America and the Caribbean cover 15 per cent of the Earth's land surface. The region receives 29 per cent of global precipitation and possesses one third of the world's freshwater resources. However, the irregular distribution of water in the region affects its availability.

53. Latin America and the Caribbean produced 7 per cent of global greenhouse gas emissions in 2000, and the figure is expected to climb to 9 per cent in 2050.[2]

54. The Latin American and Caribbean region produces 4.3 per cent of global carbon dioxide emissions from industrial processes and 48.3 per cent of emissions caused by land-use changes. They produce 9.3 per cent of global methane emissions generated by human activity.[3]

55. Seventy per cent of the greenhouse gas emissions in Latin America and the Caribbean are produced by Argentina, the Bolivarian Republic of Venezuela, Brazil and Mexico.[4]

56. The impact of climate change can be reflected in:

(a) Loss of biodiversity;

(b) An increase in the intensity and frequency of hurricanes;

(c) Changes in precipitation patterns;

(d) An increase in the flow of rivers;

(e) Glacier changes and recessions;

(f) Decreased availability of water resources.

57. The majority of countries in the region have established an institutional infrastructure to support participation in the clean development mechanism (CDM-designated national authorities).

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[2] Share of Global Emissions. Common POLES IMAGE baseline data, 2000.

[3] Climate Change in Latin America and the Caribbean. United Nations Environment Programme, 2004.

[4] Climate Change in Latin America and the Caribbean. United Nations Environment Programme, 2004.

58. In many countries, executive agencies have been set up to promote the development of projects for the reduction of greenhouse gas emissions among local and foreign investors. These agencies, which are generally attached to ministries of the environment, have consolidated information programmes on the opportunities available for participation in the clean development mechanism (CDM), the training and support of potential project initiators through boards of trade, and the facilitation of operational arrangements such as financing, and the certification and monitoring of CDM projects with respect to the official bodies of the United Nations Framework Convention on Climate Change.

59. This institutional infrastructure for promoting the region's active participation in the international carbon market has developed in different ways from country to country. While some have well-established programmes (for example, Brazil, Colombia, Costa Rica and several other Central American countries), others are just beginning to set them up and would benefit from horizontal cooperation within the region with those countries that have already acquired several years of experience.

60. The designated national authorities and their programmes for facilitating the creation of projects in each country have set up an informal network which meets regularly under the auspices of the Andean Development Corporation to discuss technical issues. They have a common regional platform for presenting the consolidated positions of Latin America and the Caribbean to the official bodies of the Conference of the Parties to the Framework Convention that are linked to CDM (such as the CDM Methodology Panel), with proposals for streamlining the validation of common regional projects.

61. The discussion forums on technical issues and policies held by the national authorities responsible for the Convention and national participation in CDM are especially timely, as the commitment period 2008 to 2012 of the Kyoto Protocol is approaching and there is an increased demand for CDM projects in the region, particularly on the part of the European Union countries.

62. The establishment of regional or subregional forums at a higher political level has not proceeded on a par with the technical networks of the designated national authorities referred to. The fact that this topic is not a political priority for the ministries of economy and planning and other high-level political authorities in the region weakens their position vis-à-vis the outreach by the Governments of countries in Annex B of the Protocol (Japan, the European Union), which are the investors for the first commitment period and would like to see greater participation, commitment and credibility on the part of Latin American and Caribbean Governments as active and reliable bidders of projects to cover their needs in accordance with the Kyoto targets for 2008-2012.

63. With respect to obstacles, there is an international consensus that the current CDM rules limit the size and number of the projects that our region and the rest of the developing world can offer on the international carbon market.

64. This subject of negotiation will probably influence the international regime on climate change in the post-Kyoto period. Within this perspective, the region can benefit, in the short and medium term at the forthcoming Conferences of the Parties, if it is able to reach consensus on joint negotiation positions in order to change the rules in its favour and overcome the recognized obstacles, such as:

(a) Simplification of the rules governing the requirements for certifying the additionality of projects and the definition of related baselines;

(b) Provision of increased resources to improve the operation of the Executive Board, which governs CDM and gives final and official approval to CDM projects;

(c) Improved funding options and conditions in general for initiators of CDM projects in developing countries.

65. The regional priorities and challenges in this area are as follows:

(a) The establishment of a regular regional forum for reflection with the participation of ministries of energy and planning and trade associations and representatives from energy-intensive industrial sectors with high greenhouse gas emissions in which CDM projects could easily be developed (for example, power generation, transport, residential and industrial power consumption, and the electricity, cement, mining and iron and steel sectors);

(b) In terms of technical issues, the region must strengthen the capacity of its negotiators and ministries of foreign affairs with respect to all technical aspects that are subject to negotiation, including the modelling of policy options and scenarios regarding different rules, and the improvement of capacity analysis, training and technical assistance in research centres, universities and relevant regional and international bodies;

(c) Increased regional participation in scientific bodies such as the Intergovernmental Panel on Climate Change, the Inter American Institute for Global Change Research and the Subsidiary Body for Scientific and Technological Advice of the United Nations Framework Convention on Climate Change;

(d) From the financial point of view, there is also need for increased financing and insurance tailored for CDM projects and their specific characteristics. To date, the gap has been filled by multilateral banks and a few regional development finance institutions. The present challenge is to innovate and expand appropriate financing in order to reap all the possible benefits of our countries' active participation in CDM;

(e) With respect to medium-term strategy, the challenge for the region is still to find ways to compete with Asian countries (for example, China and India) on the international carbon market. The Latin American and Caribbean region clearly has comparative advantages with regard to carbon sequestration projects, especially in the areas of land use, land-use change and forestry, which are still under negotiation within the Framework Convention on Climate Change. The region would benefit if it adopted common policies and influenced the post-Kyoto regime in its favour by capitalizing on opportunities relating to its agricultural potential and its forest resources, which are of global importance.

66. It will be equally important for the region to promote the inclusion of countrywide projects in CDM, including ones that could incorporate its large cities. These cities offer excellent opportunities for technological leaps forward towards economies with low greenhouse gas emissions, through public-policy interventions, the rapid introduction of clean technology in transport, and energy efficiency (for example, residential and industrial), which could be incorporated into plans for public investment in infrastructure. This additional clean technology component

could be financed through the second-generation clean development mechanisms (post-Kyoto).

67. For all these reasons, it is clear that the countries of the region would do well to continue strengthening their national and collective capacities to develop their own policy strategies regarding the international regime on climate change and to participate as influential and proactive actors in future negotiations, under the United Nations Framework Convention on Climate Change.

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Report of the Asia-Pacific regional implementation meeting**

I. Major conclusions and recommendations of the Asia-Pacific regional implementation meeting

1. The Asia-Pacific regional implementation meeting reviewed the implementation status of the outcomes of the World Summit on Sustainable Development and partnerships for the further application of the Plan of Implementation of the World Summit on Sustainable Development (Johannesburg Plan of Implementation) in Asia and the Pacific region.

2. The meeting expressed appreciation of the discussion by the panel composed of representatives of major stakeholders who held an interactive debate on the theme of the meeting regarding how to continue economic growth for poverty reduction without compromising environmental sustainability. The key points discussed by the panel were considered by the meeting.

3. The meeting adopted the message from Asia and the Pacific to the Commission on Sustainable Development at its fourteenth session, which is included as an annex to the present report, and requested the Secretariat to transmit the message to the Commission.

4. The meeting had before it a document entitled "Review of the implementation status of the outcomes of the World Summit on Sustainable Development: an Asia-Pacific perspective". It noted that the review could be submitted to the Commission on Sustainable Development at its fourteenth session as a note by the secretariat.

* E/CN.17/2006/1.

** Organized by the Economic and Social Commission for Asia and the Pacific in collaboration with the Food and Agriculture Organization of the United Nations Regional Office for Asia and the Pacific, the United Nations Development Programme Regional Centre in Bangkok, the United Nations Environment Programme Regional Office for Asia and the Pacific and the United Nations Industrial Development Organization Regional Office in Bangkok.

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II. Organization of the session

A. Opening, duration and organization

5. The Asia-Pacific regional implementation meeting was held in Bangkok on 19 and 20 January 2006 in collaboration with the Regional Office for Asia and the Pacific of the Food and Agriculture Organization of the United Nations (FAO), the Regional Centre in Bangkok of the United Nations Development Programme (UNDP), the Regional Office for Asia and the Pacific of the United Nations Environment Programme (UNEP) and the Regional Office in Bangkok of the United Nations Industrial Development Organization (UNIDO). The objective of the meeting was to prepare inputs from an Asian and Pacific perspective for the Commission on Sustainable Development at its fourteenth session in a cluster of areas: namely, energy for sustainable development, industrial development, air pollution/atmosphere and climate change.

6. In his welcoming address, the Executive Secretary of the Economic and Social Commission for Asia and the Pacific (ESCAP) noted the achievements of Asia and the Pacific region in economic growth, dramatic poverty reduction and challenges to environmentally sustainable economic growth. He also noted the importance and significance of the meeting in assessing the implementation in the region of the outcomes of the World Summit on Sustainable Development in the previously mentioned areas. The Executive Secretary expressed confidence that the meeting, with the joint efforts of all the delegates and co-organizers, would make a great contribution to preparations for the fourteenth session of the Commission on Sustainable Development and show the commitment of Asia and the Pacific region to playing a key role in sustainable development.

7. In her opening statement, the Director of the Division for Sustainable Development, Department of Economic and Social Affairs of the United Nations Secretariat, expressed her support for regional implementation meetings as integral components that would enrich the work and discussions of the Commission on Sustainable Development by bringing regional perspectives to a global forum. She acknowledged the disparities in Asia and the Pacific region's rapid economic growth and its significant impact in helping to achieve sustainable development. She expressed the hope that the meeting would be fruitful and successful and suggested focusing questions in order to stimulate discussion.

8. As a Vice-Chair and representative of the region in the Bureau of the Commission on Sustainable Development at its fourteenth session, Javad Amin-Mansour noted with appreciation that the meeting would provide significant inputs to the forthcoming deliberations of the Commission on Sustainable Development. He highlighted the importance of energy for sustainable development and the linkages between energy, industrial development, air pollution/atmosphere and climate change. He emphasized particularly the need to assess the means of implementation among cross-cutting issues, such as technology transfer, enhancing human resources, capacity-building and building the necessary infrastructure, regional and international cooperation, mobilization of resources and financial support, exchange of information and views on best practices.

9. In his inaugural address, Kitti Limskul, a Vice-Minister of the Government of Thailand, welcomed the participants. He noted that poverty still prevailed in the

region and expressed the expectation that the meeting would identify obstacles and challenges to the development of the energy industry, which could contribute to poverty reduction while enhancing environmental sustainability, mitigating air pollution and tackling climate change problems. He further noted that the meeting should be perceived as a forum for sharing lessons learned and best practices to expedite application of the Johannesburg Plan of Implementation in the region. He described some of the important initiatives undertaken by the Government of Thailand in addressing sustainable development including the development and promotion of biofuel and a strategy to lower the ratio of the energy consumption growth rate to the gross domestic product growth rate from the current level of 1.4:1 to 1:1 by 2007. The Vice-Minister noted further that Thailand planned to increase the share of renewable energy from 0.5 per cent of primary energy for commercial purposes to 8 per cent by 2011. In addition to introducing clean technologies, Thailand would foster the "polluter pays" principle and ISO 14000 and encourage public participation in addressing climate change issues. He also noted that the Government of Thailand intended to host the thirteenth Conference of the Parties to the United Nations Framework Convention on Climate Change and the third meeting of the parties to the Kyoto Protocol.

B. Attendance

10. The session was attended by the following members and associate members of ESCAP: Armenia, Australia, Azerbaijan, Bangladesh, Bhutan, Cambodia, China, Cook Islands, Democratic People's Republic of Korea, Fiji, Georgia, India, Indonesia, Islamic Republic of Iran, Japan, Kazakhstan, Kyrgyzstan, Macao Special Administrative Region, Mongolia, Nepal, Pakistan, Philippines, Republic of Korea, the Russian Federation, Sri Lanka, Thailand, Tonga, Turkmenistan, United States of America and Uzbekistan.

11. Representatives of Austria and of the European Union participated as observers.

12. The following United Nations bodies and specialized agencies were represented: the Department of Economic and Social Affairs, FAO, UNDP, UNEP, UNIDO and the Office of the United Nations High Commissioner for Human Rights.

13. The following intergovernmental organizations, non-governmental organizations and other entities also attended: Asian Institute of Technology, Bengal Fine Ceramics, Centre for a Sustainable Built Environment, Centre for Energy Environment Resources Development, China Standard Certification Center, Energy Environment Consulting Company, Energy Management Association of the Philippines, Federation of Chambers of Commerce and Industry of Sri Lanka, Indonesian Peoples Forum, Institute for Global Environmental Strategies, SRG Bangladesh, International Institute for Sustainable Development, Japan Lanka Industrial Development Center, Korea Energy Economics Institute, Mongolia Erel Cement Factory, National Cleaner Production Center (India), National Institute of Agriculture Planning and Projection (Viet Nam), National Productivity Council (India), Pacific Islands Forum secretariat, People Centred Business and Economic Institute (Indonesia), PT. Semen Padang, South Asia Cooperative Environment Programme, South Pacific Applied Geoscience Commission, Stakeholder Forum for

a Sustainable Future, Steel Asia Manufacturing Corporation, Sustainable Development Policy Institute, The Energy and Resources Institute, Third World Network, Viet Nam Cleaner Production Center, Viet Tri Paper Company, Women's Major Group and Yayasan Pelangi Indonesia.

C. Election of officers

14. The meeting elected the following as members of the Bureau: Chairperson: Liana Bratasida, Assistant Minister for Global Environment Affairs and International Cooperation, Ministry of Environment (Indonesia); Vice-Chairpersons: Monthip Sriratana Tabucanon, Deputy Permanent Secretary, Ministry of Natural Resources and Environment (Thailand); Jayampathi Pathmaraja Hettiarachchi, Secretary, Ministry of Industrial Development (Sri Lanka); Uilou Fatai Samani, Director of Environment (Tonga); Zamaira Tohtohodjaeva, Counsellor, Department of International Organizations, Ministry of Foreign Affairs (Kyrgyzstan); Xu Huaqing, Director, Research Professor, Energy Research Institute, National Development and Reform Commission (China); and Rapporteur: Gerald Leo Morvell, Assistant Secretary, Energy Futures Branch, Department of the Environment and Heritage (Australia).

D. Agenda

15. The Committee adopted the provisional agenda (ESD/RIMAP/2006/L.1), which read as follows.

1. Opening of the meeting.
2. Election of officers.
3. Adoption of the agenda.
4. Review of the implementation status of the outcomes of the World Summit on Sustainable Development: an Asia-Pacific perspective.
5. Partnerships for the further implementation of the Johannesburg Plan of Implementation.
6. Message from Asia and the Pacific to the fourteenth session of the Commission on Sustainable Development.
7. Other matters.
8. Adoption of the report of the meeting.

E. Acknowledgements

16. The meeting noted with appreciation the collaborative efforts made by the United Nations bodies and agencies in organizing the meeting, in particular with regard to the preparation of the information and background documents and the message. The meeting also expressed appreciation of the role of the Department of Economic and Social Affairs, ESCAP, UNEP and the Energia International Network on Gender and Sustainable Energy in mobilizing financial resources to enable

relevant stakeholders, including government officials and major groups, to participate in the meeting.

F. Adoption of the report of the meeting

17. The meeting adopted the present report on 20 January 2006.

Annex to the report of the Asia-Pacific regional implementation meeting

Message dated 20 January 2006 from Asia and the Pacific to the Commission on Sustainable Development at its fourteenth session

1. We, the participants at the Asia-Pacific regional implementation meeting, met to review the progress made as well as identify key challenges and opportunities towards further implementation of the Johannesburg Plan of Implementation of the World Summit on Sustainable Development, Agenda 21 and the Programme for the Further Implementation of Agenda 21, as well as the 2005 World Summit Outcome, in the areas of: (a) energy for sustainable development; (b) industrial development; (c) air pollution/atmosphere; and (d) climate change. In this message we draw the attention of the Commission on Sustainable Development to the following points as unique features for its consideration for Asia and the Pacific region. We pledge to avail ourselves of all the opportunities emerging in the region, with appropriate leadership and partnership, to do what has to be done to further the sustainable development agenda in Asia and the Pacific, and to bring out key messages that are unique and important for furthering our efforts.

A. Achieving sustainable development in Asia and the Pacific

2. The size and diversity of characteristics and circumstances of countries in Asia and the Pacific position the region to play a key role in global sustainable development. With different national circumstances come differences in priorities and goals for attaining sustainable development and these factors create specific challenges for cooperation.

3. Attaining sustainable development in Asia and the Pacific is a key to global sustainability. The social factors of economic development and environmental degradation currently are not adequately integrated with other dimensions of sustainable development. Sustainable production and consumption patterns, which emphasize a long-term perspective while recognizing the linkages to social development and equity, do not receive enough attention from political, business or community leaders.

4. Asia and the Pacific region has made considerable progress towards sustainable development and the achievement of the Millennium Development Goals. Strategic approaches to sustainable development are increasingly being considered at the country level, focusing on finding the right balance between economic growth for poverty reduction and environmental sustainability.

5. Despite the considerable progress achieved, macroeconomic policy in many cases does not yet integrate or attach sufficient priority to environmental sustainability concerns. Only 15 countries in the region have been assessed as "early achievers" or "on track" in developing national sustainable development strategies for enhanced integration of the principles of sustainable development into national policies and programmes.

6. Asia and the Pacific region is experiencing the fastest economic growth in the world. Strong economic growth coincides with increasing pressure on the limited carrying capacity of the region, manifested by erosion of the natural resource base, rising levels of pollution that results in threats to human health and increasing anthropogenic pressure on climate systems.

7. The current pattern of economic growth presents challenges to enhanced sustainable development, and poses major threats to environmental sustainability in Asia and the Pacific region. The region will not be able to continue its economic growth without improving the ecological efficiency and social equity of its development patterns.

8. In the region 670 million people are still living on less than US$ 1 per day.

9. Environmentally unsustainable economic growth patterns, with the demand for ecosystem goods and services exceeding the region's ecological carrying capacity, need to be changed or reversed in order to achieve the Millennium Development Goals.

10. Poverty eradication, changing unsustainable patterns of production and consumption and protecting the natural resource base are essential requirements for sustainable development. The main challenge for countries individually and collectively in Asia and the Pacific region is finding ways to continue the economic growth necessary for attaining social equity and poverty reduction without compromising environmental sustainability.

11. Current planning perspectives and political systems that reward short-term economic gain lead to the neglect of short- and long-term sustainable development goals. Even where policies that encourage environmental sustainability have been introduced, the institutional, financial and human capacity to formulate, monitor and implement the policies is often lacking.

12. Strong political will and enhanced capacities within government as well as civil society and community-based groups are necessary for the implementation of effective and efficient policies that support sustainable development for the expedient implementation of the Johannesburg Plan of Implementation.

13. At the Ministerial Conference on Environment and Development in Asia and the Pacific, 2005, Asian and Pacific countries recommitted themselves to promoting sustainable development, and agreed to move towards an environmentally sustainable economic growth approach (green growth) by improving the ecological efficiency of their economic development patterns and by creating synergy between the environment and the economy. The environment must be presented as an opportunity for economic growth. A shift to a paradigm that stimulates investment in markets for environmentally sustainable goods and services would provide business opportunities and employment to synergize ecological efficiency and business profit. Such a paradigm shift would replace the prevailing perception of the environment and the economy as a "zero-sum game" with a virtuous cycle that would reward eco-efficient practices, thereby providing economic incentives and opportunities for continued environmentally sustainable economic growth in support of poverty eradication.

B. Issues linking energy for sustainable development, industrial development, air pollution/atmosphere and climate change

14. While industrial growth and energy contribute immensely to social and economic development, they are also contributors to the environmental challenges facing the region, including adverse influences on climate and air quality.

15. Natural resource-, energy- and pollution-intensive industries dominate manufacturing and production in many parts of the region, and link industrial development closely to increased energy consumption, air pollution and global environmental change. The links are manifested in several ways, including in the industrial components of energy and water production, distribution and consumption; in the emissions of greenhouse gases, sulphur dioxide and nitrogen oxides from industrial activity and the combustion of fossil fuels; and in the generation and discharge of pollutants and other wastes into the natural environment.

16. Current patterns of economic growth already risk causing irreversible environmental damage. A major challenge facing the region is to find ways to ensure that industrial development and energy consumption and production do not pose a threat to environmental sustainability and social equity. This challenge could be addressed by improving the eco-efficiency of the industrial and energy sectors, which would enhance environmental sustainability.

17. There is increasing recognition of the negative impacts and risks to future prosperity stemming from climate change and air pollution and other forms of environmental degradation. Scientific evidence as well as public and political pressure have emerged to make the development direction of the industrial and energy sectors congruent with appropriate and available environmentally sound technologies.

18. There is a need to re-examine and reassess planned or ongoing structural change in energy and industry from a sustainable development perspective. Among these changes are the replacement of capital stock with environmentally sound technologies, depending on the availability of resources.

19. All stakeholders have an obligation to evaluate their contribution to these risks and to participate in the transformation to a more sustainable industrial system.

C. Energy for sustainable development

20. Energy services are fundamental and essential to support economic growth for poverty eradication, particularly in vulnerable economies, such as the least developed countries, landlocked developing countries, small island developing States and countries with economies in transition.

21. One of the main challenges facing the region lies in finding ways to continue to provide and expand access to equitable energy services in support of economic growth and poverty eradication without jeopardizing long-term prosperity and environmental sustainability.

22. Energy security, energy efficiency and energy conservation have vital roles to play in long-term energy strategies. Strong policy support as well as enhanced

capacity are needed to further promote energy efficiency and to enable the private sector to capture opportunities to improve eco-efficiency. With rising oil prices and with a view to lessening dependency on imported energy resources, there is a greater opportunity to explore the benefits of energy efficiency, alternative energy resources and low-emission technologies.

23. Diversification of energy sources in terms of policy and practice has not been successful in many parts of Asia and the Pacific. Many oil-producing and oil-exporting countries still rely on oil as a major source for income and as a major energy source for consumption. In addition, many oil-importing countries still rely on oil as a major source of energy.

24. The region needs to promote further the use of environmentally sound and economically viable technologies as well as renewable resources, with which the region is endowed, focusing on resource-saving, generating less waste and recycling. The development and acceptance of low-emission technologies will require innovation on the part of industry and the support of Governments.

25. Inadequate access to financing and technologies remains a major constraint to rapid progress in that direction, and many policies and regulations in the region do not encourage energy conservation or energy efficiency owing largely to the energy pricing policies and subsidies provided for certain forms of energy.

26. Energy security in Asia and the Pacific region has deteriorated as rapid economic growth has increased the demand for energy, resulting in increased net imports to the region, primarily from Middle Eastern sources. Countries less well endowed with fossil fuel reserves increasingly look towards lowering their import dependency.

D. Industrial development

27. Asia and the Pacific region has a wide range of experiences in promoting growth in the industrial sector. Industrial development has progressed in areas where power facilities, trained labour, modern transport and raw materials are available. However, the gap between low-income and middle- and high-income developing countries in Asia and the Pacific region is widening, pointing to a growing industrial divergence within economies in the region. Sustainable industrial development efforts have slowed and in some cases have been interrupted by financial crises and environmental and natural disasters.

28. Industrial growth has put significant pressures on the environment, reflecting the unsustainable production and consumption patterns of the current development paradigm, thus underlining the need for urgent action to promote environmentally sustainable growth patterns in the region.

29. In enhancing eco-efficiency, markets for environmental goods and services need to be developed, a process to which the industrial sector could respond. Such markets need support in terms of policy and regulation, research and development, technological development and investment. These emerging business opportunities should be supported in order to ensure economic growth for sustainable development.

30. The promotion of small and medium-sized enterprises (SMEs) has been a key element in economic policy, as it is aimed at increasing competitiveness. Although the potential impacts of SMEs on the environment are well recognized in many instances to be deteriorating, current measures are inadequate to help to promote and disseminate environmentally sound technologies among SMEs.

31. Industrial development has certain undeniable impacts on job opportunities, social situations, communities and families.

E. Air pollution/atmosphere

32. Different geographic, climatic and socio-economic features represented in the Asia and Pacific region represent different concerns, challenges and opportunities in terms of air quality and atmospheric issues. Irrespective of this diversity, most countries in the region have issues of common concern.

33. Air pollution is a manifestation of the unsustainable production and consumption patterns of the current development paradigm, which could be improved by addressing consolidated actions towards sustainable energy and industrial development.

34. Deterioration of indoor and urban air quality; transboundary pollution, including acid deposition and haze, dust and sand storms; and greenhouse gases are the major atmospheric issues in the region and cause adverse health impacts.

35. In the developing countries of the region, the use of coal and biomass fuels for cooking and heating is a major source of indoor air pollution and a significant cause of health hazards, in particular among women and children in poorer communities.

36. Outdoor air pollution, especially in urban areas, is on the increase because of rapid urbanization, increasing vehicular traffic, industrial growth and increased energy consumption. Of the 15 cities in the world with the highest levels of particulate matter, 12 are located in Asia.

37. National strategies for integrated air quality management and institutional mechanisms and infrastructure for their implementation are at the development stage and mostly too weak to effect significant progress.

38. Existing intergovernmental initiatives need to be strengthened and widened in scope in order to address issues of concern, such as indoor air pollution, acid deposition, ground-level ozone, emission of mercury, promotion of clean technologies and development, as well as trade in sustainable energy resources and technologies.

F. Climate change

39. The diverse geographical, climatic and demographic characteristics of Asia and the Pacific mean that the effects of climate change and the nature of and opportunities for countermeasures vary across subregions, countries and even within countries. Climate change and drought are destroying cultures and heritages that have endured for many centuries.

40. Stresses from climate and climate-related events and phenomena that could be exacerbated by future climate change are already being felt by most countries through extreme weather and natural disasters in the region. Adaptations in agricultural, forestry and terrestrial ecosystems are considered among the high-priority measures for most countries of the region, while for some others such as small island developing States, adaptation in water resources and coastal zones, including sea level rise, are a top priority.

41. Lack of integration of climate change issues into national development plans is a major concern, and mitigation and adaptation measures require additional policy attention.

42. There is a need for improved awareness among policymakers of the importance of integrating climate change concerns into social and economic policies and plans. In particular, awareness of promoting the environment as an emerging market and a business opportunity, and not as a burden, needs to be recognized. As oil prices rise, action to address climate changes would become compatible with economic development.

43. Developed and developing countries, including countries with economies in transition, have a role to play in emission reductions, including through the clean development mechanism of the Kyoto Protocol to the United Nations Framework Convention on Climate Change, and a range of partnership approaches.

G. Opportunities for furthering the sustainable development agenda in Asia and the Pacific

44. Opportunities for enhanced transition to sustainable development emerge as valuable lessons are learned, and indicate that economic growth and environmental protection objectives are compatible in Asia and the Pacific. There are a number of successful initiatives and good practices at the national, subregional and regional levels, illustrating the progress attained and indicating the opportunities for further implementation through policy dialogues, replication of best practices, partnerships among multi-stakeholders, South-South cooperation and enhanced regional and subregional cooperation.

45. A transition towards sustainable development requires a paradigm shift, where priorities, attention and resources are directed towards supporting developments within the carrying capacity of ecosystems in the region. The region is encouraged to observe that some countries have initiated this paradigm shift as reflected in policies, including the 3R (reduce-reuse-recycle) policy of Japan, the resource recycle society of the Republic of Korea and the resource-saving society of China. Efforts to replicate and promote such a paradigm shift will contribute to the attainment of the goals of sustainable development.

H. Subregional issues

1. Central and North-East Asia

46. Challenging issues for Central and North-East Asia include cooperation to enable capacity-building; energy conservation; technology research and

development; technology transfer and use, including new and renewable energy sources; and diversification of the energy mix. Industrial development in the subregion has many social and environmental impacts, and incorporating research and development into industrial development to change the path of manufacturing and production in support of eco-efficiency remains a challenge. The impact on health of air pollution from industry and energy use within countries and between countries highlights the issues of health and transboundary air pollution. In addition, given the growing use of transport to the subregion, the linkages between transport and air pollution, climate change, energy use and industry are serious challenges. Capacity-building for skills related to all of these issues has been difficult.

47. Regional and subregional partnerships are important mechanisms for dealing with climate change. Subregional cooperation initiatives, such as the Regional Environmental Action Plan in Central Asia for addressing environmental issues, including common and trans-border issues, are of high importance for solving complex problems of the countries with economies in transition in their efforts towards sustainable development.

2. Small island developing States

48. For the Pacific island countries and territories energy and climate change issues are of particular relevance. The Pacific small island developing States face some unique challenges owing to the large number of small islands scattered across a vast ocean. This poses major problems for rural communities to effectively access affordable and reliable energy, which is exacerbated by the countries having poor communication and transport infrastructure, weak institutions, limited data and human and financial resources. The subregion is reliant predominately on imported fossil fuels, making them particularly vulnerable to irregularities in supply due to poor infrastructure and monopoly control, as well as fluctuating international market conditions. Limited access to affordable energy sources is a major constraint to economic development and increased well-being, which must be urgently addressed if the countries are to achieve their national sustainable development goals. Pacific island countries and territories also experience a high level of risk from the effects of the changing frequency or intensity of extreme weather, or climate variability phenomena or through accelerated sea level rise. Reducing the risks associated with the impacts of extreme weather and climate variability is a fundamental development challenge faced by those countries and territories. This must be urgently addressed in order to build resilience and improve livelihoods, economic well-being and health, as well as maintain biodiversity and the unique Pacific culture.

49. Pacific Island Forum leaders, in recognizing such barriers, constraints and challenges to sustainable economic development, have developed and adopted several regional policies and frameworks, such as the Pacific Islands Energy Policy and Strategic Action Plan, the Pacific Islands Framework for Action on Climate Change, Climate Variability and Sea Level Rise and the Framework for Action on Disaster Risk Reduction and Disaster Management. The next challenge is to implement these regional policies and frameworks at the national level under the Pacific Plan for Strengthening Regional Cooperation and Integration, which was adopted by the leaders in October 2005. The simplification of development partner processes and recognizing the special needs of Pacific small island developing States under the Global Environmental Facility and other international instruments

are needed along with the adoption of key strategies highlighted in the Paris Declaration on Aid Effectiveness to assist Pacific island countries and territories to achieve their national development goals and commitments under the Millennium Development Goals. These needs must be explicitly recognized as needing special treatment and unique approaches.

3. South-East and South Asia

50. Economic development and the alleviation of poverty are the foremost issues of the region and subregions; they require enormous investments in the energy sector, with emphasis on small and medium-sized projects involving private sector engagement. The high cost of energy production is adversely affecting industrial development. Currently, the development of all forms of energy, including nuclear energy, is not equal. The cost of renewable energy is high and there is great potential in developing sources of energy that emit less carbon. Technology and finance pose significant barriers, because less greenhouse gas-intensive technologies are not available in the public domain of developing countries and are not financially competitive with conventional technologies.

51. Government efforts to raise awareness are not adequately supplemented and complemented by the private sector and international agencies. Regional and subregional collaboration and technology transfer are weak, particularly between South Asia and South-East Asia. Other challenges for the subregions include inequitable growth, gender inequalities and weak governance. The subregions are particularly vulnerable to the impacts of climate change and are lacking in clean development projects under the Kyoto Protocol due to many factors such as high transaction costs, complicated procedures and underdeveloped networks for research and development. Multi-stakeholder involvement at the country, subregional and regional levels as well as between bilateral and multilateral donors and non-governmental organizations is not strong.

4. Major groups

52. Greater stakeholder engagement in policy formulation, project and programme development as well as actual implementation are steps that will increase ownership and ensure sustainability and effective implementation on the ground. Intergovernmental organizations and Governments should continue to ensure adequate and predictable funding to support multi-stakeholder participation and adopt mechanisms that reflect the interests of all the parties affected.

53. Partnerships and other constructive initiatives are important in the transition to sustainable development and the major groups continue to support them where appropriate. Such partnerships promote good governance, but all stakeholders should adhere to and implement the Bali Guidelines on Type II partnerships and adopt mutually agreed criteria where they relate to the thematic clusters under consideration.

I. Means of implementation for Asia and the Pacific

54. The diversity of economic development and other characteristics of the region reflect different approaches and levels of attainment towards sustainable development. However, in general among developing countries, policies and

strategies still appear to be weak in developing synergies and linkages between economic growth and environmental sustainability.

55. Coherent and coordinated policies are lacking owing to weak linkages among the policies for the four aforementioned areas, namely: energy for sustainable development, industrial development, air pollution/atmosphere and climate change.

56. A number of important factors were linked to the development of effective policies, including strong governance; finance and creating the right investment climate; skill development and capacity-building; technology research, development and transfer; sound information for policymakers; and decoupling the trade-off between economic development and environmental degradation.

57. Providing an enabling environment in the form of commitments, transparent institutional and legal frameworks, institutional collaboration, infrastructure, investment, economic instruments, technology and information-sharing and accessible funding are important factors in the wider replication of good practices within and among countries of the region.

58. Many developing countries lack the required human resources to enter on a sustainable development path. Capacities need to be strengthened, not least at the community level, to facilitate the introduction of appropriate technologies that consider local knowledge, practices and structures in support of sustainable development.

59. Changing how the long-term costs and benefits of investments are calculated would provide an opportunity for creating a level playing field for sustainable options in support of a shift towards environmentally sustainable economic growth. Efforts made by international agencies and financing institutions to implement commitments could be further enhanced through coordinated intergovernmental initiatives.

60. The region is vulnerable to natural disasters but lacks the capacity to effectively mitigate the impacts from such disasters, including potential climate change-related impacts, haze, brown clouds and the lingering aftermath of the 2004 tsunami and 2005 South Asian earthquake.

61. In strengthening energy and industrial development policies, the region is not taking full advantage of the potential effects offered by a range of partnerships. Effective partnerships require a multi-stakeholder approach and gender sensitivity.